



Aggarwal College Ballabgarh

LESSON PLAN

17 WEEKS (JAN-APRIL)-2025

Name of Faculty: Manshi Tyagi

Designation/ Department: Assistant Professor/ Department of Chemistry

CLASS:B.Sc. II Year

SEMESTER:4

SECTION:

SUBJECT: Organic Theory

Week		
1	7-1-2025	
	8-1-2025	
	9-1-2025	Section D-ALDEHYDES & KETONES: Nomenclature and structure of the carbonyl group.
	10-1-2025	Synthesis of aldehydes and ketones with particular reference to the synthesis of aldehydes from acid chlorides
	11-1-2025	
	12-1-2025	S. U. N. D. A. Y.
2	13-1-2025	
	14-1-2025	
	15-1-2025	
	16-1-2025	Topic Continued....
	17-1-2025	Advantage of oxidation of alcohols with chromium trioxide (Sarett reagent) pyridinium chlorochromate (PCC) and pyridinium dichromate.
	18-1-2025	
	19-1-2025	S. U. N. D. A. Y.
3	20-1-2025	
	21-1-2025	
	22-1-2025	
	23-1-2025	Topic Continued....

	24-1-2025	Synthesis of aldehydes and ketones using 1,3-dithianes, Gatterman aldehyde synthesis, Gatterman Koch reaction, synthesis of ketones from nitriles and from carboxylic acids. Physical properties.
	25-1-2025	
	26-1-2025	REPUBLIC DAY/S. U. N. D. A. Y.
4	27-1-2025	
	28-1-2025	
	29-1-2025	
	30-1-2025	Topic Continued.....
	31-1-2025	Comparison of reactivities of aldehydes and ketones. Mechanism of nucleophilic additions to carbonyl group with particular emphasis on benzoin, Aldol, Perkin and Knoevenagel condensations.
	1-2-2025	
	2-2-2025	S. U. N. D. A. Y/BASANT PANCHAMI
5	3-2-2025	
	4-2-2025	
	5-2-2025	
	6-2-2025	Topic Continued.....
	7-2-2025	Condensation with ammonia and its derivatives. Wittig reaction. Mannich reaction, Michael reaction.
	8-2-2025	
	9-2-2025	S. U. N. D. A. Y
6	10-2-2025	
	11-2-2025	
	12-2-2025	HOLIDAY: GURU RAVIDAS JAYANTI
	13-2-2025	Topic Continued.....
	14-2-2025	Use of acetals as protecting group. Oxidation of aldehydes, Baeyer–Villiger oxidation of ketones, Cannizzaro reaction. MPV, Clemmensen, Wolff -Kishner, LiAlH ₄ and NaBH ₄ reductions. Halogenation of enolizable ketones.
	15-2-2025	

	16-2-2025	S. U. N. D. A. Y.
7	17-2-2025	
	18-2-2025	
	19-2-2025	
	20-2-2025	Topic Continued.....
	21-2-2025	Topic Continued.....
	22-2-2025	
	23-2-2025	S. U. N. D. A. Y.
8	24-2-2025	
	25-2-2025	
	26-2-2025	HOLIDAY: MAHA SHIVRATRI
	27-2-2025	Topic Continued....
	28-2-2025	An introduction to α,β - unsaturated aldehydes and ketones.
	1-3-2025	
	2-3-2025	S. U. N. D. A. Y.
9	3-3-2025	
	4-3-2025	
	5-3-2025	
	6-3-2025	Topic Continued....
	7-3-2025	Topic Continued....
	8-3-2025	
	9-3-2025	S. U. N. D. A. Y.
10	10-3-2025	
	11-3-2025	

	12-3-2025	
	13-3-2025	HOLI
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	15-3-2025	
	16-03-2025	S. U. N. D. A. Y.
11	17-3-2025	
	18-3-2025	
	19-3-2025	
	20-3-2025	Section-C -Diazonium Salts: Mechanism of diazotisation, structure of benzene diazonium chloride, Replacement of diazo group by H, OH, F, Cl, Br, I, NO ₂ and CN groups
	21-3-2025	Topic Continued....
	22-3-2025	
	23-3-2025	S. U. N. D. A. Y.
12	24-3-2025	
	25-3-2025	
	26-3-2025	
	27-3-2025	Reduction of diazonium salts to hyrazines, coupling reaction and its synthetic application
	28-3-2025	Topic Continued....
	29-3-2025	
	30-3-2025	S. U. N. D. A. Y.
13	31-3-2025	HOLIDAY: ID-UL-FITR
	1-4-2025	
	2-4-2025	
	3-4-2025	Preparation and reactions of cyanides

	4-4-2025	Preparation and reactions of isocyanides
	5-4-2025	
	6-4-2025	S. U. N. D. A. Y.
14	7-4-2025	
	8-4-2025	
	9-4-2025	
	10-4-2025	HOLIDAY: MAHAVIR JAYANTI
	11-4-2025	Preparation and reactions of urea and diazomethane.
	12-4-2025	
	13-4-2025	S. U. N. D. A. Y.
15	14-4-2025	HOLIDAY: AMBEDKAR JAYANTI
	15-4-2025	
	16-4-2025	
	17-4-2025	Nitro Compounds: Preparation of nitroalkanes and nitroarenes
	18-4-2025	Chemical Reaction of nitroalkanes and nitroarenes
	19-4-2025	
	20-4-2025	S. U. N. D. A. Y.
16	21-4-2025	
	22-4-2025	
	23-4-2025	
	24-4-2025	Mechanisms of electrophilic substitution in nitroarenes and their reductions in acidic, neutral and alkaline media.
	25-4-2025	Topic Continued.....
	26-4-2025	
	27-4-2025	S. U. N. D. A. Y.

17	28-4-2025	
	29-4-2025	
	30-4-2025	HOLIDAY: AKSHAY TRITYA
	01-05-2025	Halonitroarenes: Preparation, chemical reaction & reactivity.
	02-05-2025	Topic Continued.....
	03-05-2025	
	04-05-2025	S. U. N. D. A. Y.

Manshi Tyagi
 Department of Chemistry